



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,989	09/05/2003	Hendrik Hans Addi Klaassen	110003.00017	9707

7590 08/25/2006

Susan M. Donahue
Rockwell Automation, Inc.,
704-P
1201 South Second Street
Milwaukee, WI 53204-2496

EXAMINER

HAN, YOUNGHUIE JESSICA

ART UNIT	PAPER NUMBER
----------	--------------

2838

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,989

Applicant(s)

ADDI KLAASSEN ET AL.

Examiner

Y. J. Han

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-16,18-25 and 30-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-16 and 18-25 is/are allowed.
- 6) ☒ Claim(s) 30-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 30-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Studtmann (4,511,835).

Studtmann discloses a system for converting AC power and DC power comprising: a rectifier (51) configured to receive AC power at an input and having at least one switch (52-57) controllable to convert the AC power to DC power provided to an output of the rectifier; and a controller (58) configured to monitor at least one of the input and the output (66, 67) of the rectifier and identify a reduction in the AC power in excess of a threshold and in response to identifying the reduction in the AC power in excess of the threshold (the set point voltage from voltage divider 98, 99 determines the steady state operating conditions), adjust a switching time of the at least one switch to control an amount of inrush current permitted upon a recovery of the AC power following the reduction in AC power in excess of the threshold. The controller is configured “to produce properly timed gating pulses for application to the gates of SCR’s 52-57 to control the firing angles of the SCR’s as required to establish the d-c bus voltage across lines 66 and 67 at the average magnitude necessary to establish and to maintain the inverter output voltage at the desired steady amplitude level.” The claim limitations “to advance a switching-on time” and “to return the switching-on time” read on the increasing and the decreasing of the

Art Unit: 2838

firing angles of SCR's 52-57 to bring the bus voltage back up to the required steady state level. Further, the voltage recovery of at least three-quarters of the desired steady state level and the incremental move of the switching-on time of the switch is met by the automatic correction performed by the controller 58. With respect to claim 37, Studtmann's controller clearly move the switching-on time in a non-linear progression. Hence, claims 30-37 fail to set forth any patentable feature distinguishable from Studtmann.

Response to Arguments

3. Applicant's arguments with respect to claims 30-37 have been fully considered but they are not persuasive. The new amendments to claim 30 read on the set point voltage of Studtmann. The set point voltage from voltage divider 98, 99 determines the steady state operating conditions and represents a desired amplitude and a desired frequency for the ac voltage produced by the inverter 65 for application to motor 81. The set point is selected to satisfy the speed demanded by the mechanical load driven by the motor. Thus, the detecting of drop in AC power beyond a specified threshold is inherently disclosed in Studtmann. With respect to claim 33, recitation "at least three quarters of the voltage" reads on any three quarters and above voltage of Studtmann. In other words, such limitation is too broad to set forth any patentable feature distinguishable from Studtmann. As for claim 37, applicant merely alleges that Studtmann does not disclose the movement of switching-on time is a non-linear progression without specifically pointing out how the language of the claim patentably distinguishes over the reference. Since the controller is configured to produce firing angles of the SCR's as required dynamically, the movement of switching-on time is considered to be non-linear progression.

Allowable Subject Matter

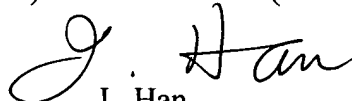
4. Claims 1, 3-16, and 18-25 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. J. Han whose telephone number is 571-272-2078. The examiner can normally be reached on Mon-Fri 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


J. Han
Primary Examiner
Art Unit 2838